

Protein Fractionation on Various Resins

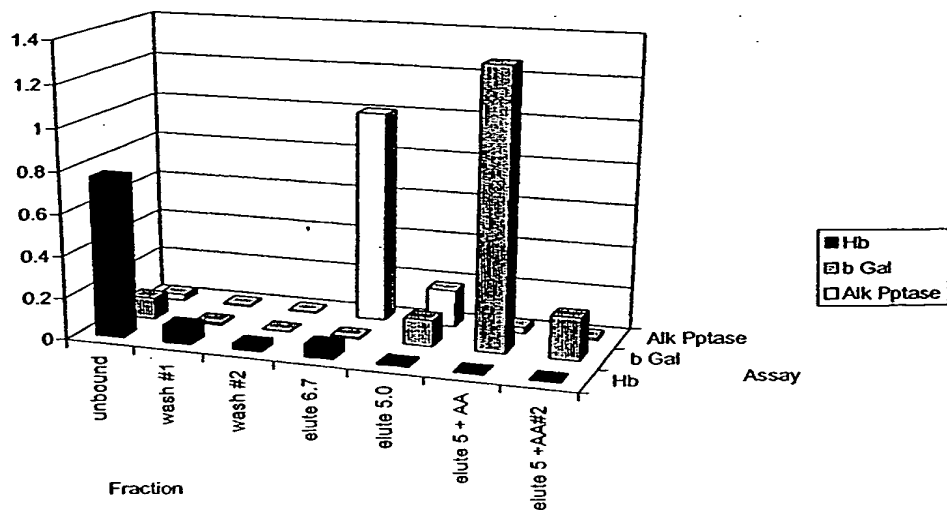


FIG. 1A

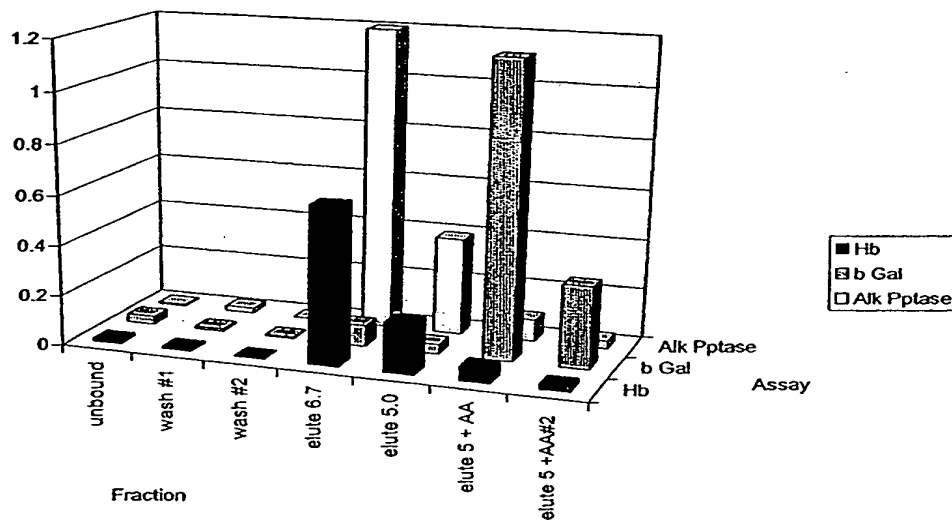


FIG. 1B

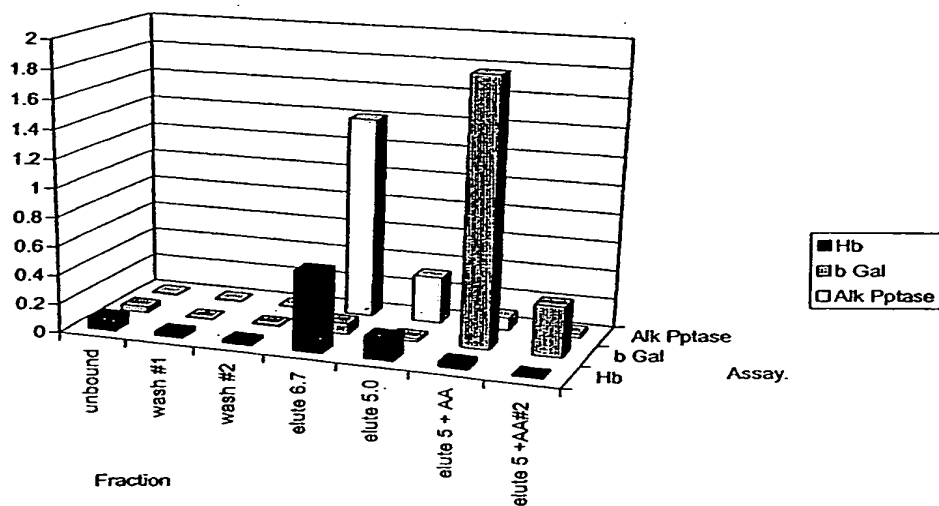


FIG. 1C

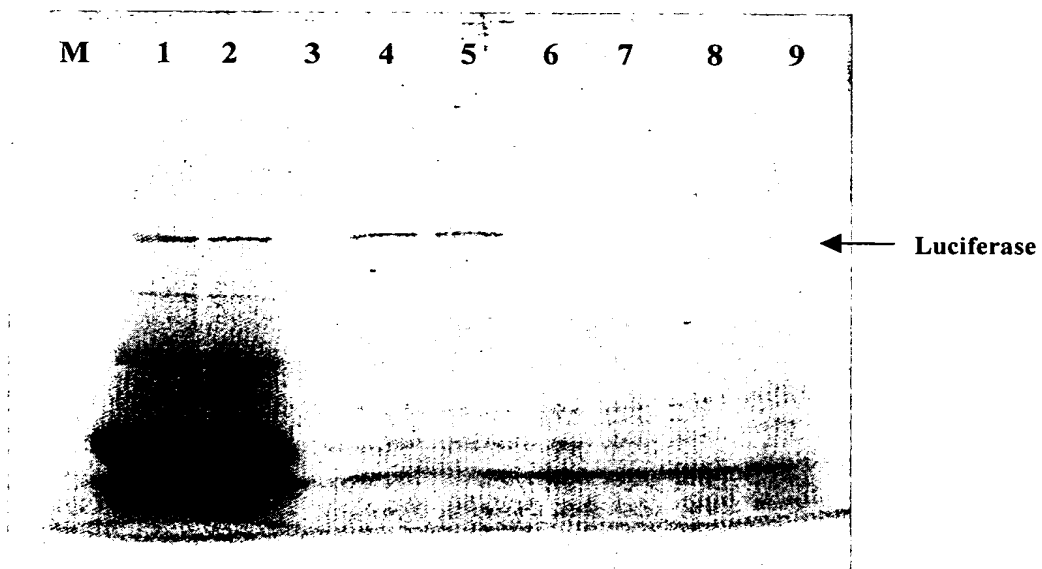
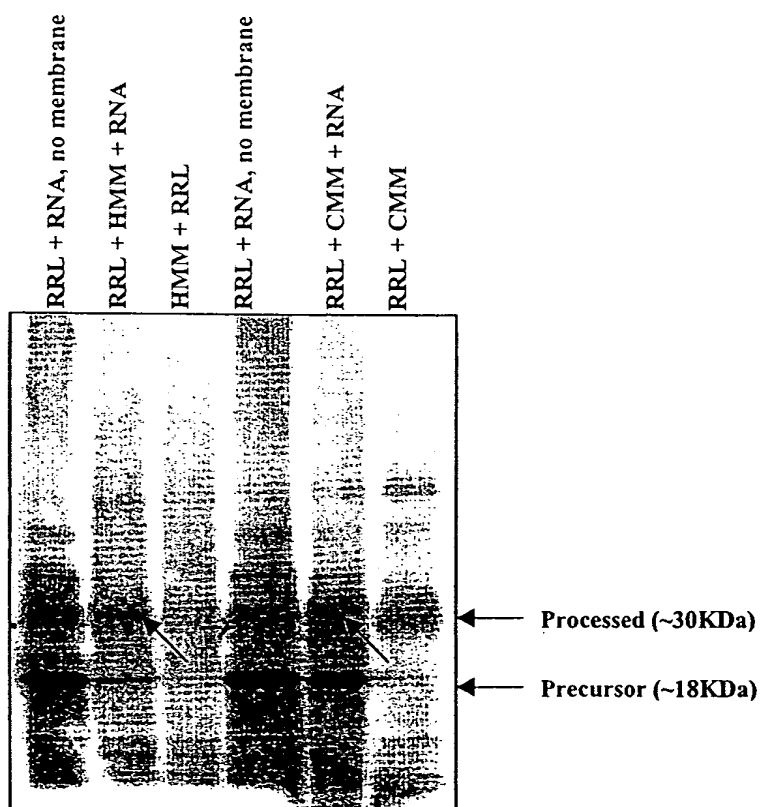
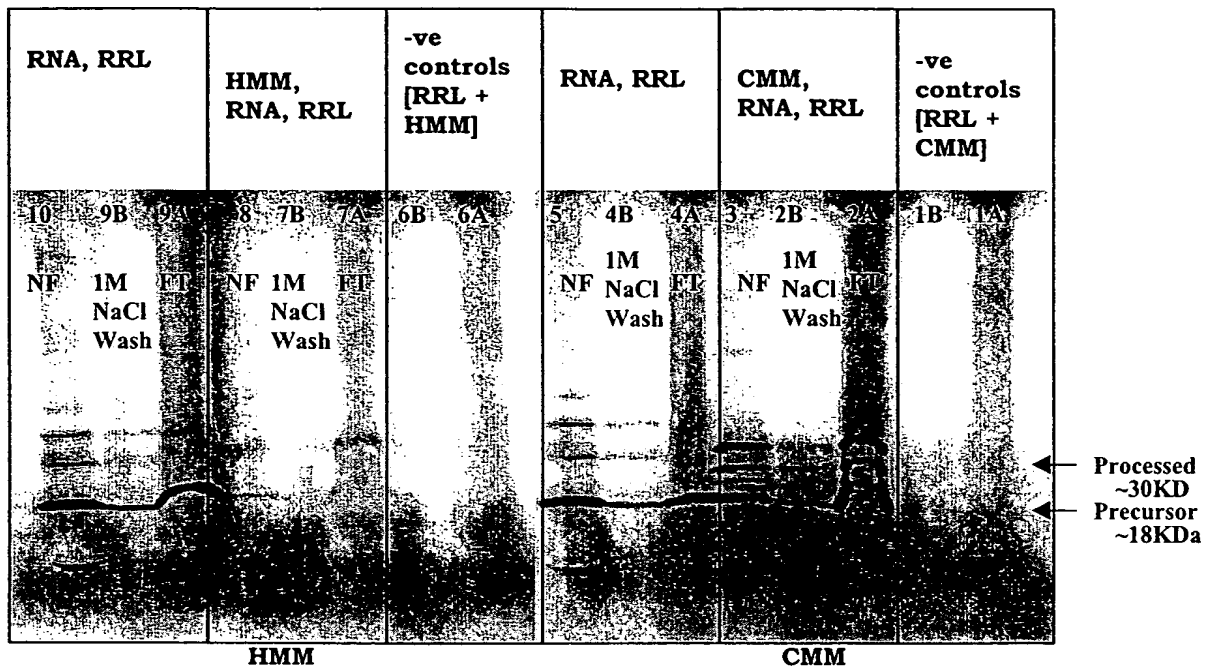


FIG. 2



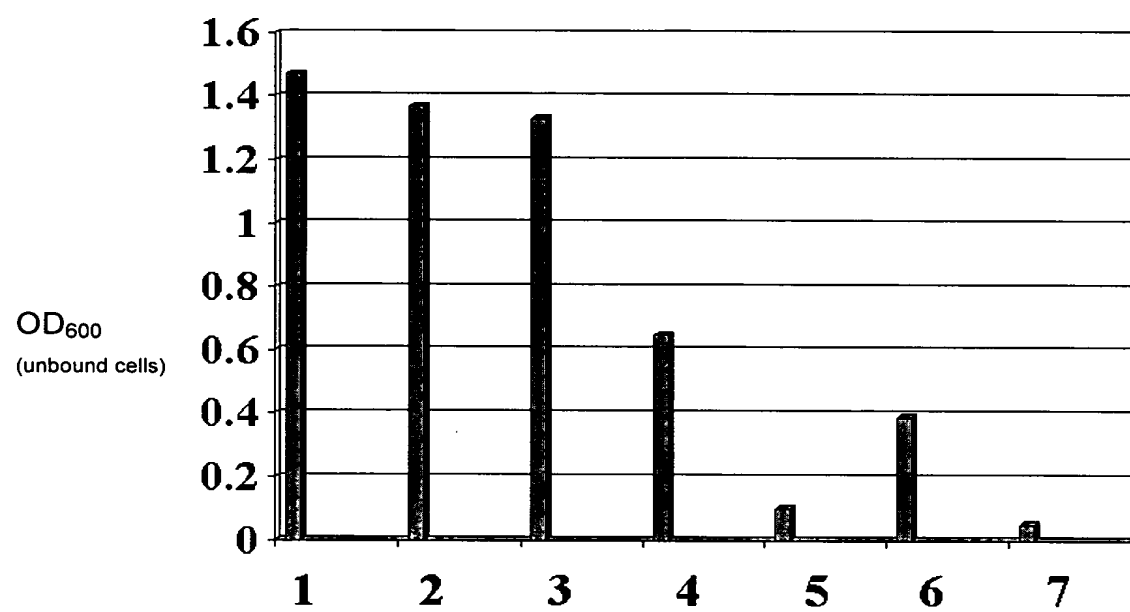


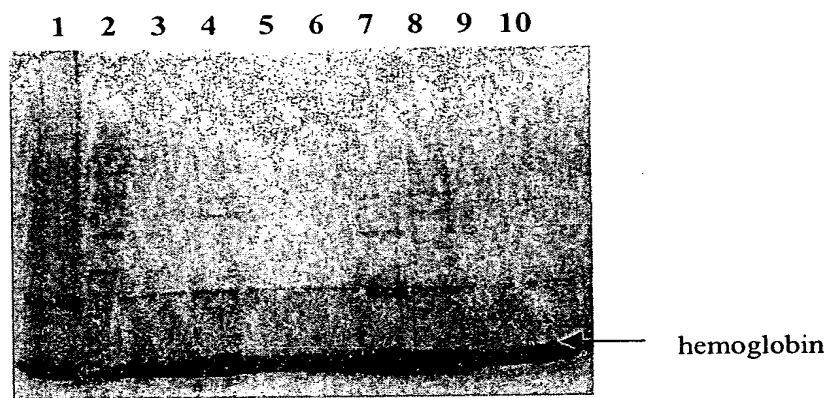
FIG. 5

Purification of His-RNaseHI on Nickel NTA-Modified Silica Magnetic Particles



FIG. 6

Purification and Separation of Hemoglobin



Lanes 1: Control lysate (before treatment)
2: Molecular weight markers
3: Nickel 100mM imidazole elution
4: Copper 100mM imidazole elution
5: Cobalt 100mM imidazole elution
6: Zinc 100mM imidazole elution
7: Nickel 500mM imidazole elution
8: Copper 500mM imidazole elution
9: Cobalt 500mM imidazole elution
10: Zinc 500mM imidazole elution

FIG. 7

Purification of His-RNaseH1

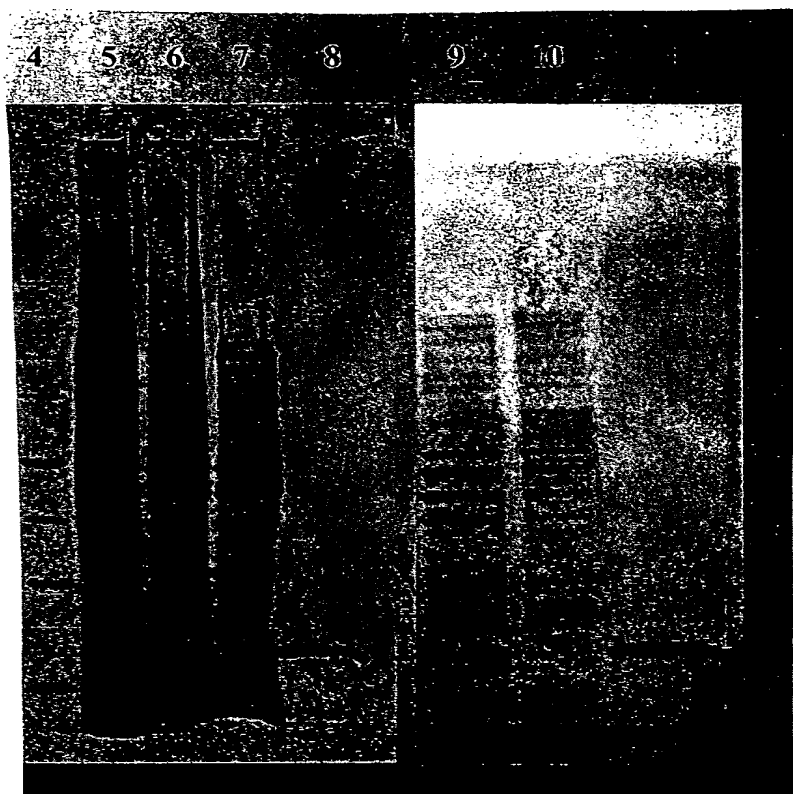


FIG. 8

FIG. 9A

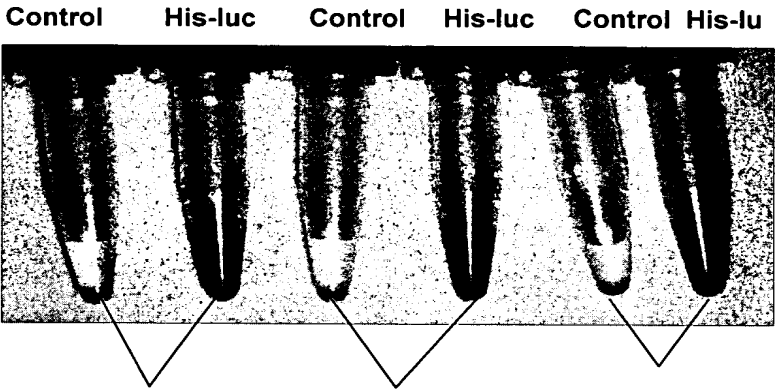


FIG. 9B

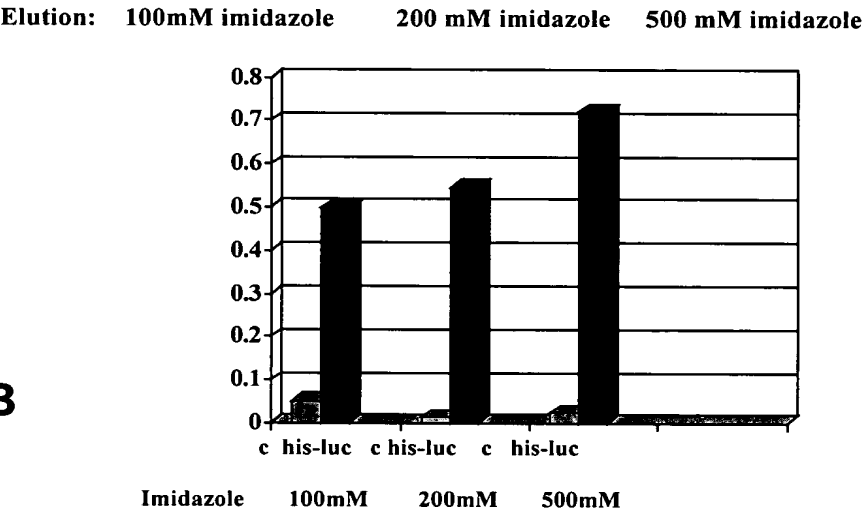


FIG. 9C

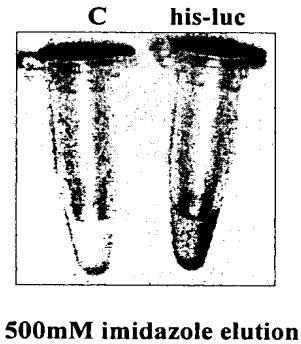




FIG. 10

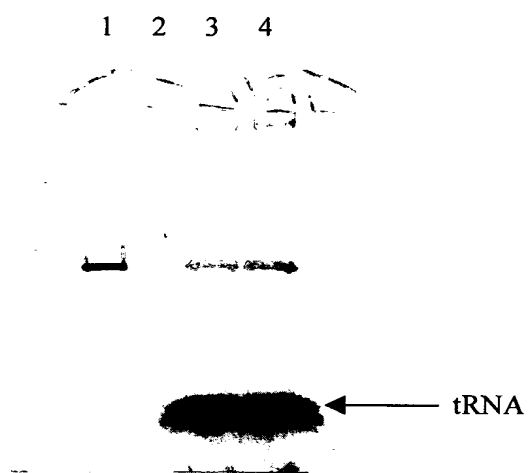


FIG. 11

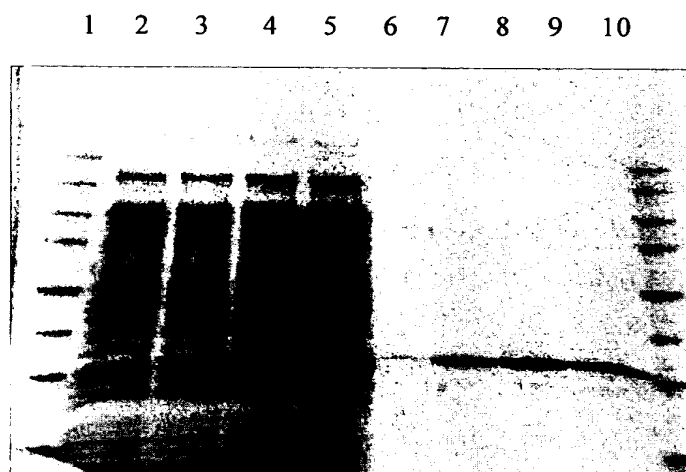
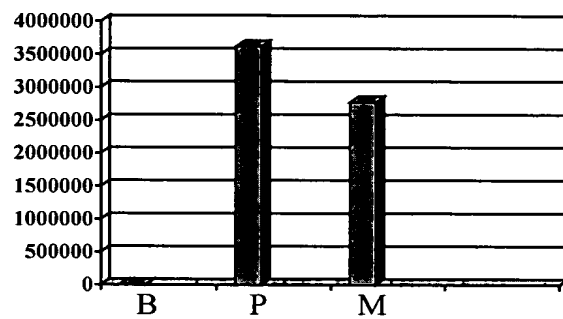


FIG. 12



B = Blank
P = Purified his-methionyl tRNA synthetase
M = Particle attached his-methionyl tRNA synthetase

FIG. 13

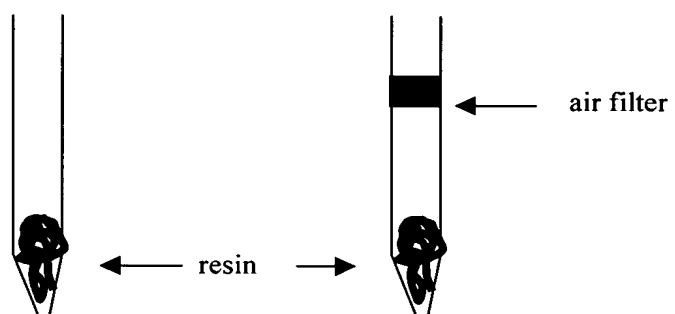


FIG. 14

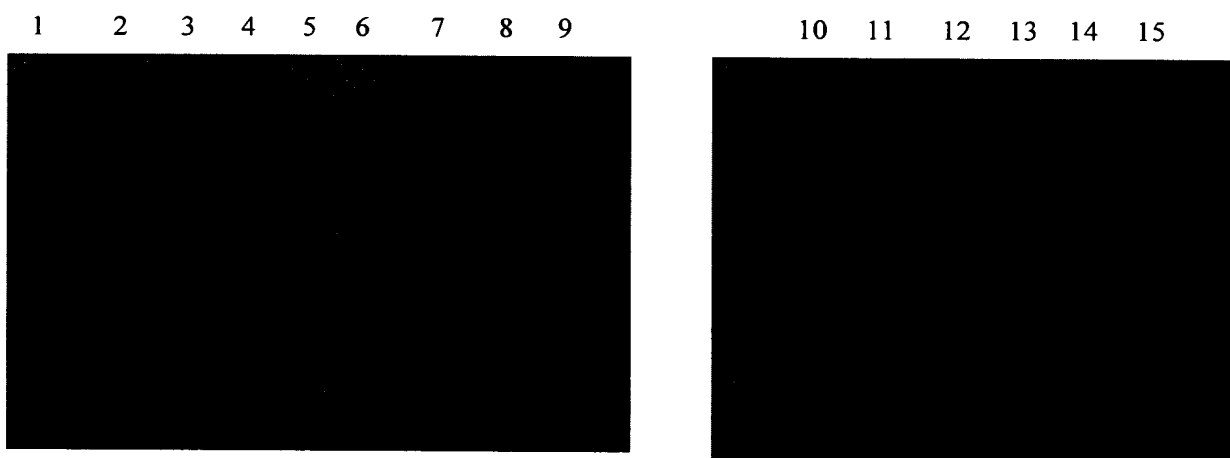


FIG. 15

FIG. 16A

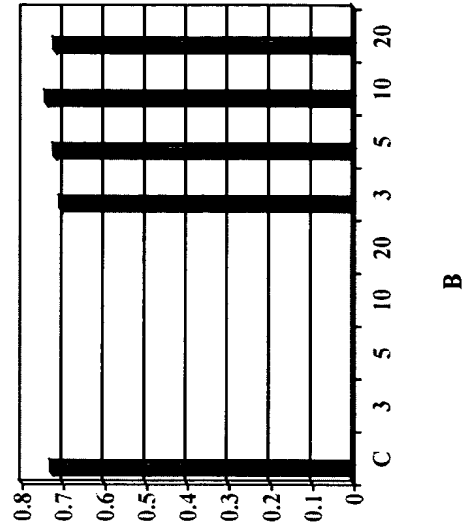
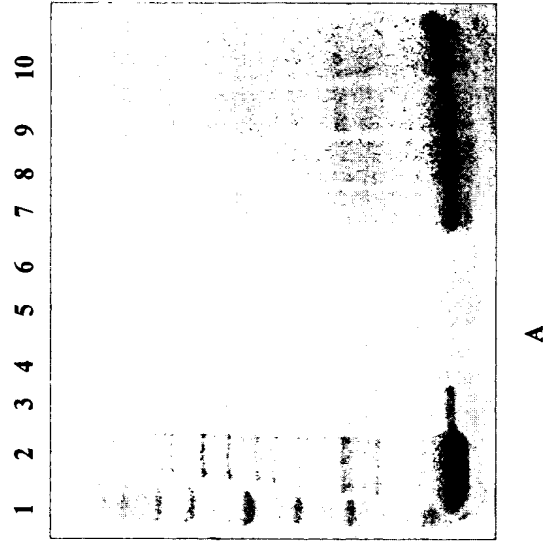


FIG. 16B

B. Protein concentration

- C. Rabbit reticulocyte lysate (RRL) control
- 1. 3 μ l RRL flow through
- 5. 5 μ l RRL flow through
- 10. 10 μ l RRL flow through
- 20. 20 μ l RRL flow through
- 1. 1 μ l RRL elute
- 5. 5 μ l RRL elute
- 10. 10 μ l RRL elute
- 20. 20 μ l RRL elute

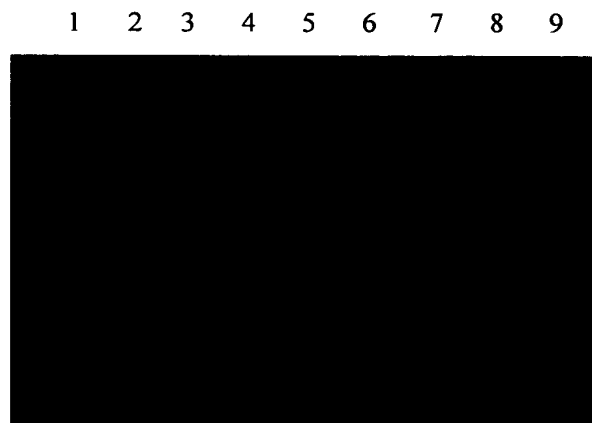
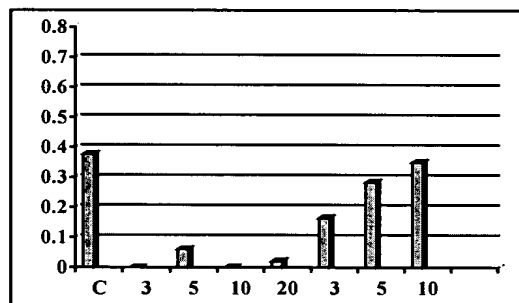


FIG. 17A



B. Protein concentration

- C. CHO cell lysate control
- 1. 3 μ l CHO cell lysate flow through
- 5. 5 μ l CHO cell lysate flow through
- 10. 10 μ l CHO cell lysate flow through
- 20. 20 μ l CHO cell lysate flow through
- 1. 1 μ l CHO cell lysate elute
- 5. 5 μ l CHO cell lysate elute
- 10. 10 μ l CHO cell lysate elute

FIG. 17B

FIG. 18A

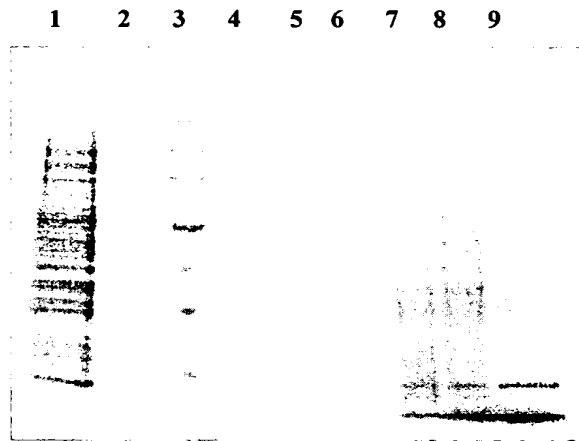


FIG. 18B

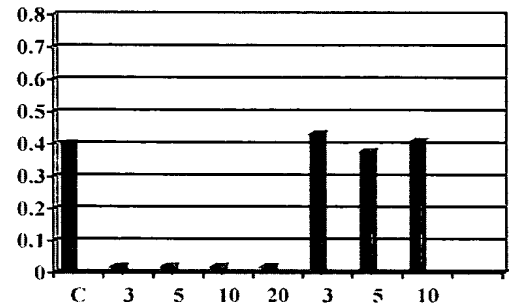
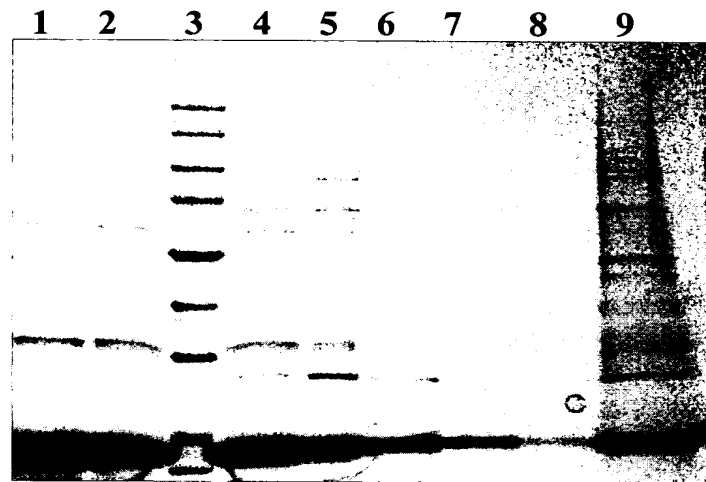


Fig. A. Binding and elution of complex mixture of proteins from copper-MagneSil particles

- Lanes: 1. Wheat germ lysate control
2. 3 µl wheat germ lysate flow through
3. Marker
4. 5µl wheat germ lysate flow through
5. 10µl wheat germ lysate flow through
6. 20 µl wheat germ lysate low through
7. 1 µl wheat germ lysate elute
8. 5µl wheat germ lysate elute
9. 10µl wheat germ lysate elute

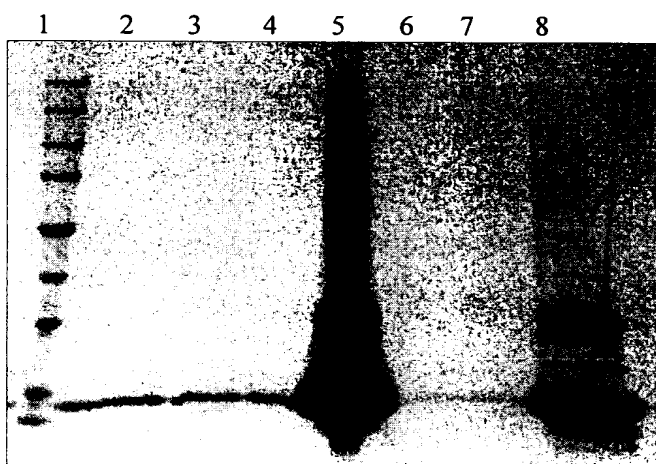
Fig. B. Protein concentration

- C. wheat germ lysate control
1. 3 µl wheat germ lysate flow through
5. 5µl wheat germ lysate flow through
10. 10µl wheat germ lysate flow through
20. 20 µl wheat germ lysate flow through
1. 1 µl wheat germ lysate elute
5. 5µl wheat germ lysate elute
10. 10µl wheat germ lysate elute



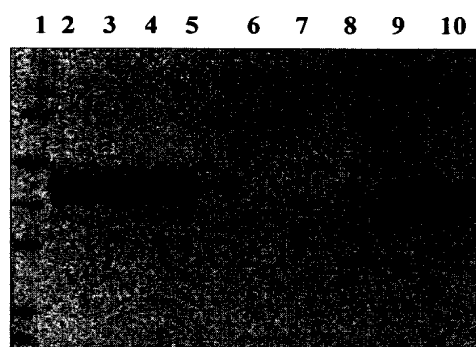
Lanes: 1. Eluted with 100 mM imidazole
2. Eluted with 200 mM imidazole
3. Marker
4. Eluted with 500 mM imidazole
5. Eluted with 1M imidazole
6. Eluted with pH 8.5 ammonium acetate
7. Eluted with pH 9.5 ammonium acetate
8. Eluted with pH 10.5 ammonium acetate
9. Eluted with pH 12.5 ammonium acetate

FIG. 19



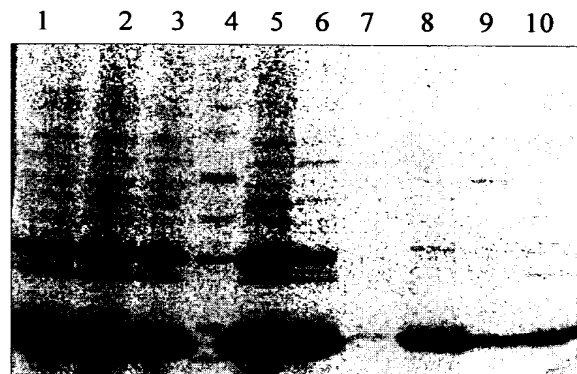
Lanes: 1. Molecular weight markers
2. Eluted with pH 8.5 ammonium acetate
3. Eluted with pH 9.5 ammonium acetate
4. Eluted with pH 10.5 ammonium acetate
5. Eluted with pH 12.5 ammonium acetate
6. Eluted with 0.05% TFA
7. Eluted with 0.1% TFA
8. Eluted with 1.0% TFA

FIG. 20



Lanes 1: Marker	6: Ga ⁺⁺⁺ -magnetic silica flow through
2: Control ovalbumin	7: NTA-magnetic silica elute
3: NTA-magnetic silica flow through	8: Nickel-magnetic silica elute
4: Nickel-magnetic silica flow through	9: Fe ⁺⁺⁺ -magnetic silica elute
5: Fe ⁺⁺⁺ -magnetic silica flow through	10: Ga ⁺⁺⁺ -magnetic silica elute

FIG. 21



- | | |
|---|--|
| 1. Control retic lysate | 6. Fe^{2+} -magnetic silica FT |
| 2. NTA-magnetic silica FT | 7. NTA-magnetic silica 2% NH_4OH eluant |
| 3. Ni^{2+} -magnetic silica FT | 8. Ni^{2+} -magnetic silica a 2% NH_4OH eluant |
| 4. Marker | 9. Ga^{3+} -magnetic silica a 2% NH_4OH eluant |
| 5. Ga^{3+} -magnetic silica FT | 10. Fe^{3+} -magnetic silica a 2% NH_4OH eluant |

FIG. 22

FIG. 23A

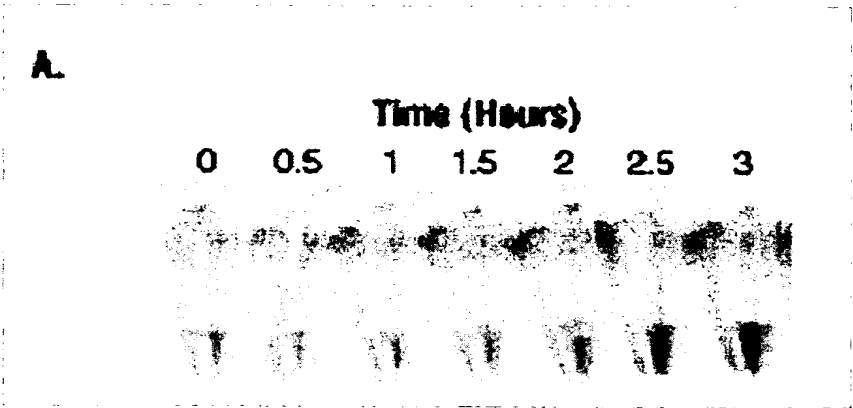


FIG. 23B

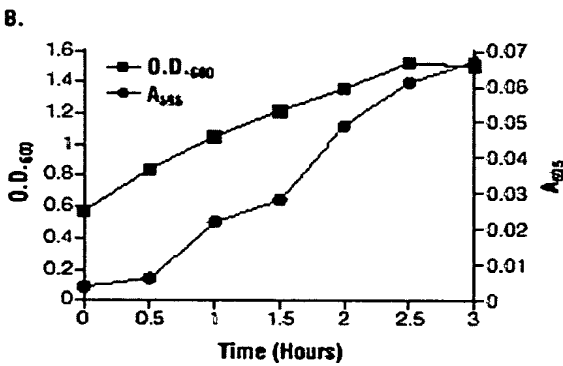


FIG. 23C

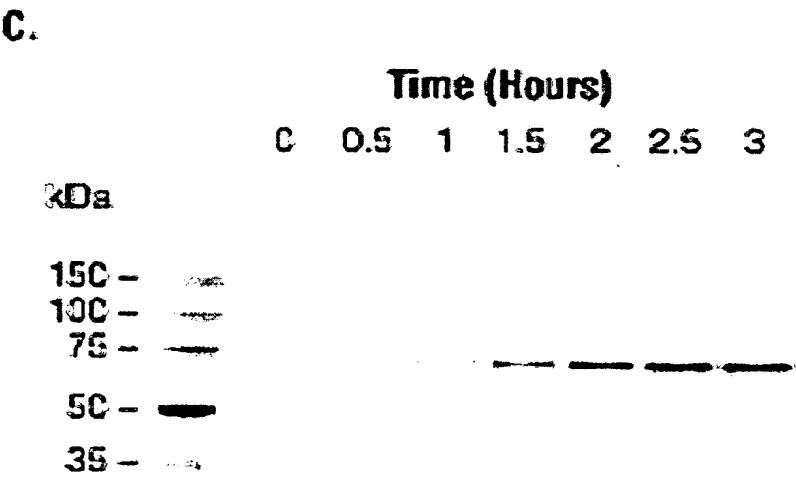


FIG. 24

1 2 3 4

